

CLAIMS

1. A mobile telephone arranged to automatically re-establish roaming service with a network based on an  
5 "Operator List" by modifying the Registered Public Land Mobile Network ("RPLMN") during Location Update, through the use of a pre-programmed SIM card,
2. A method of automatically establishing a roaming  
10 service for a mobile telephone, including using a pre-programmed SIM card such that a Location Update is performed in the following logical order:-
  1. Registered Public Land Mobile Network ("RPLMN"),  
15 i.e. the last registered network as stored in the SIM directory EF<sub>LocI</sub> (EF6F7E)
  2. Home PLMN ("HPLMN")
  3. PLMNs contained in a "PLMN Selector" data field based on the "Operator List".
  - 20 4. User - defined preferred PLMN
  5. Other PLMNs with received signal level above a predetermined strength in random order; and
  6. All other PLMNs in order of descending signal strength
- 25 3. A method according to Claim 2 in which the PLMN is stored in the "Operator List" reserved in a fixed but implementation-dependent memory location in the SIM,

e.g. EF6D30.

4. A method according to Claim 2 or 3, in which the  
"PLMN Selector" data comprises PLMN's listed in the  
5 "Operator List" copied on to the "PLMN Selector", the  
"Operator List" taking precedence over user - defined  
preferred PLMN's which are appended at the end of the  
"Operator List" in the "PLMN Selector".
- 10 5. A method according to any one of claims 2 to 4  
wherein during network selection the country code of the  
RPLMN is compared with networks defined in the "Operator  
List" the most preferred network with the country code  
replacing the RPLMN.
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